What is RICE and why do we now have to get them permitted?

- RICE is Reciprocating Internal Combustion Engines or Generators. The back-up generators you find all over KSC to generate electricity in an emergency or back-up situation.
- Currently, existing RICE is divided into three emission units on the Title V Air Operation Permit.
- ♦ EU086, KSC Diesel Fired Units with a limit of 305,000 gallons,
- **♦** EU087, KSC Gasoline Fired Units with a limit of 38,000 gallons, and
- ♦ EU088, LC39 Emergency Power Plant (C5) with a limit of 170,000 gallons and 1250 hours.
- Stationary vs. mobile source:
- ♦ Stationary is any RICE that remains or will remain at a location for more than 12 consecutive months (replacement engines will be included in calculated month total).
 - **♦** Mobile sources do not need to be permitted.
- KSC previously assumed that any new or reconstructed RICE would automatically roll into EU086 or EU087. EFR then called out new stationary RICE that is over the permitting emission threshold needs to get an air construction permit and then can be rolled into EU086 or EU087.
- What is the permitting emission threshold?
 - ♦ 0.5 tons per year of individual HAP,
 - ♦ 1.25 tons per year of total HAPs,
 - ♦ 0.25 tons per year of lead, or
- ♦ 5 tons per year of all other pollutants (i.e., CO, PM, VOC, NOx, SO2, etc.).
- On June 15, 2004, the EPA promulgated the RICE NESHAP (National Emission Standards for Hazardous Air Pollutants). These new requirements can also necessitate an air construction permit and a revision to the Title V Air Operation Permit for new or reconstructed RICE.
- What is an affected source of the RICE NESHAP?
 - **♦** All stationary RICE over 500 HP (~375 kW).

- Of the affected sources, what sources are EXEMPT from the RICE NESHAP?
- ♦ Emergency RICE RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine.
- **♦** Limited-Use RICE RICE that operates less than 100 hours per year.
- New RICE that must comply with the RICE NESHAP will have emission limitations and operating limitations along with control equipment, performance testing, initial and continuous compliance requirements, monitoring, installation, operation, and maintenance requirements. Basically, the RICE NESHAP becomes a compliance nightmare for KSC and we hope to limit the installation of new RICE over 500 HP (~375 kW).
- As a rule-of-thumb, here is a break-down of permitting requirements:
- ♦ If RICE is less than ~100 HP (~75 kW), no permit is required.
- ♦ If RICE is greater than ~100 HP (~75 kW) but less than 500 HP (~375 kW), an air construction permit is required and the unit will roll into the current Title V Operation Permit.
- ♦ If RICE is greater than 500 HP (~375 kW), an air construction permit and a revision to the Title V Operation Permit is required.